

## DISCORDANCE BETWEEN SYMPTOMS AND URODYNAMICS. DESCRIPTIVE ANALYSIS OF CORRELATION IN DIAGNOSIS OF FEMALE URINARY INCONTINENCE

### Hypothesis / aims of study

Urinary incontinence is a disease with a high incidence which has a negative impact on quality of life and increases gradually with age. The highest survival and longevity of women necessarily lead to further increase this pathology in the near future. The diagnostic is complex and require a carefully correlation in clinical and urodynamic aspects.

The urge incontinence is usually treated by non-invasive treatments, however stress urinary incontinence may require a surgical treatment. Every year appear more and better treatments for both medical and surgical correction of incontinence, however the correct choice will depend on a good diagnosis. For these reasons, the study of these patients requires tests that can objectify and clarify the diagnosis that we make in our office.

### Study design, materials and methods

This is a descriptive and retrospective study to compare the clinical diagnosis of the urinary incontinence with results obtained using a MMS Solar® urodynamic equipment (pressure-flow studies), between June 2006 to January 2013. We reviewed the clinical reports of 253 female patients referred to our urodynamic unit with symptomatic urinary incontinence.

The inclusion criteria were women with clinical diagnosis of urinary incontinence based on the history and physical examination and for at least one year of evolution. The exclusion criteria were active urinary tract infection (detected in urinalysis and urine culture) and/or concomitant urological medications effect.

The type of urinary incontinence (stress - SUI, mixed - MUI or urgency - UUI) was classified in all patients according to symptoms and signs observed during initial evaluation. Patient history, physical examination, urinalysis, urine culture, urethral pressure profilometry, uroflowmetry, cystometrogram, electromyography and pressure-flow study were measured. Undisposable microtip catheter was used and incontinence was classified in accordance to the parameters obtained. The clinical diagnoses were compared with the urodynamic test results.

### Results

The correlation in the diagnosis of female urinary incontinence between the clinical and the urodynamic investigation was positive in 109 patients (43.09% of the studies). Urodynamics registered normality in 63 (24.9% of studies).

In 157 patients with clinical diagnosis of SUI urodynamics registered: SUI in 54, normal in 41, MUI in 26, Detrusor Overactivity (DO) without incontinence in 24 and UUI in 12. In 48 patients with MUI urodynamics registered: UUI in 12, normal in 11, MUI in 10, SUI in 8 and DO without incontinence in 7. In 48 women with UUI, urodynamics registered: UUI in 28, normal in 11, DO without incontinence in 7 and MUI in 2.

### Interpretation of results

Different publications have revealed the highest correlation of incontinence signs and symptoms and urodynamic findings in patients with stress urinary incontinence. However, some studies have shown that the symptoms identify less than one quarter of stress urinary incontinence or the cases with Detrusor Overactivity. The diagnosis is more assertive and complete when urodynamic investigation is added, especially in difficult cases. The urodynamic study can be useful because the symptoms of mixed urinary incontinence can be difficult to specify the diagnosis. It is necessary to perform more detailed studies with a larger sample for better interpretation of the results.

### Concluding message

The urodynamic test is a complementary examination, very useful in the study of urinary incontinence and is an objective method to demonstrate the urinary incontinence diagnosed clinically. The clinical diagnosis can be different to objective urodynamic diagnosis. The urodynamic study allows planning the solution adapted for each patient.

### Disclosures

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